

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A method ~~Method~~ of automatic validation of a computer program able to access secure memory (MS) and non-secure memory (MNS), the program using at least one encryption function (DES) and at least one decryption function (DES-1), ~~characterized in that it comprises~~ comprising a verification step (E340) which verifies that:

- any function adapted to read data from said secure memory (MS) and to produce data in said non-secure memory (MNS) is an encryption function; and

- any data produced by said decryption function is stored in said secure memory (MS).

2. (currently amended) The method of automatic validation ~~Validation method~~ according to claim 1, ~~characterized in that~~ wherein —said program also uses at least one non-cryptographic function, said non-cryptographic function being chosen from a logic function, a random number generation function and an integrity check function.

3. (currently amended) The method of automatic validation ~~Validation method~~ according to claim 2, ~~characterized in that wherein~~ any data produced by said non-cryptographic function from data read in said secure memory (MS) is stored in said secure memory (MS).

4. (currently amended) The method of automatic validation ~~Validation method~~ according to claim 1, ~~characterized in that wherein~~, the computer program being in source code, the method comprises, before said verification step (E340), a step (E300) of compilation of said source code into binary script (EXE), said verification step (E340) being effected on the binary script (EXE) generated in this way.

5. (currently amended) The method of automatic validation ~~Validation method~~ according to claim 1, ~~characterized in that wherein~~ said computer program is a sensitive data generation program.

6. (currently amended) The method of automatic validation ~~Validation method~~ according to claim 1, ~~characterized in that wherein~~ said computer program is a sensitive data transformation program.

7. (currently amended) The method of automatic validation ~~Validation method~~ according to claim 1, ~~characterized in that~~ wherein each function used by said computer program is associated with at least one operating mode that defines at least one rule governing access to said memories, said operating mode being stored in a verification table (TV) used during said verification step (E340).

8. (currently amended) The method of automatic validation ~~Validation method~~ according to claim 7, ~~characterized in that it further comprises~~ comprising:

- a step (E310) of allocation of said secure memory (MS) and said non-secure memory (MNS);
- a step of loading into a working memory a verifier program for said binary script (EXE), said verifier program being adapted to implement said verification step (E340); and
- a step (E305) of loading said binary script (EXE) into said working memory.

9. (currently amended) A compiler ~~Compiler~~ wherein ~~characterized in that~~ it is adapted to implement a validation method according to claim 1.

10. (currently amended) A method ~~Method~~ of executing a computer program adapted to access secure memory (MS) and non-secure memory (MNS), the program using at least one encryption function (DES) and at least one decryption function (DES-1), ~~characterized in that~~ comprising: a verification step (E340) conforming to claim 1 is executed before the execution (E420) of each function of said program.

11. (currently amended) A use ~~Use~~ of the execution method according to claim 10 to transform or generate sensitive data.

12. (currently amended) A use ~~Use~~ of the execution method according to claim 10 to customize microcircuit cards.

13. (currently amended) An integrated ~~Integrated~~ electronic circuit ~~characterized in that~~ wherein it is adapted to implement a validation method according to claim 1.

14. (currently amended) A microcircuit ~~Microcircuit~~ card ~~characterized in that it comprises~~ comprising: an integrated electronic circuit according to claim 13.

15. (currently amended) A computer ~~Computer~~-system characterized in that it comprises comprising an electronic integrated circuit according to claim 13.

16. (currently amended) A secure ~~Secure~~-operating system adapted to implement a validation method according to claim 1.

17. (currently amended) A microcircuit ~~Microcircuit~~ card characterized in that it comprises comprising: an operating system according to claim 16.

18. (currently amended) A computer ~~Computer~~-system characterized in that it comprises comprising: an operating system according to claim 16.

19. (currently amended) A device ~~Device~~-for validating a computer program adapted to access secure memory (MS) and non-secure memory (MNS), the program using at least one encryption function (DES) and at least one decryption function (DES-1), characterized in that it comprises comprising: a verifier program adapted to verify that:

- any function adapted to read data from said secure memory (MS) and to produce data in said non-secure memory (MNS) is an encryption function; and

- any data produced by said decryption function is stored in said secure memory (MS).

20. (currently amended) ~~A validation Validation~~  
device according to claim 19, ~~characterized in that wherein the~~ verifier program is adapted to effect said verifications on the basis of a binary script (EXE) obtained by compilation of said computer program.

21. (currently amended) ~~Computer~~ A computer system comprising a secure operating system ~~characterized in that it~~ ~~comprises~~ comprising:

- means for compiling a computer program in binary script (EXE);
- means for loading said binary script (EXE) into a working memory;
- means for allocating secure memory (MS) and non-secure memory (MNS); and
- a validation device according to claim 19.